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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/927,516      | 08/13/2001  | Toshitaka Kawashima  | 212526US6           | 5905             |

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ALEXANDRIA, VA 22314

EXAMINER


STEVENSON, ANDRE C

ART UNIT PAPER NUMBER

2812

DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                 |                                      |   |
|------------------------------|---------------------------------|--------------------------------------|---|
| <b>Office Action Summary</b> | Application No.<br>09/927,516   | Applicant(s)<br>KAWASHIMA, TOSHITAKA |   |
|                              | Examiner<br>Andre' C. Stevenson | Art Unit<br>2812                     |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-8 is/are allowed.
- 6) ☒ Claim(s) 1-5 and 9-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some \* c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☒ received.
2. ☐ received in Application No. (Series Code / Serial Number) \_\_\_\_.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

**Attachment(s)**

- |   |  |
|---|--|
| 15) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 18) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.  |
| 16) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 19) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 17) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 20) <input type="checkbox"/> Other: _____                                    |

## Detail Action

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1 through 5 and 9 through 11 are rejected under 35 U.S.C. 102(a) as being unpatentable by Takahara (U.S. Pat. No.6628355).

Takahara (U.S. Pat. No.6628355), for **Claim #1**, a display apparatus comprising: a panel substrate as a display screen; a plurality of display devices arranged in a matrix configuration on a surface of said panel substrate opposite to the panel substrate surface operating as a display screen (**Fig. 1 & 10, items 11-25, Column 2, lines 27 through 32**); and a drive circuit substrate arranged on said panel substrate and having a drive circuit for driving each display element; an area of said panel substrate carrying said display devices being sub-divide into a plurality of sub-areas by a plural' of driving lines adapted for driving said display devices (**Fig. 54 & 56, item 541, Column 2, lines 52 through 58**); there being provided a plurality of said drive circuit substrates associated with said sub-areas (**Fig. 11, Column 28, lines 15 through 41**).

With respect to **Claim #3**, a display apparatus according to claim 1 wherein said drive circuit substrates are interconnected in cascade connection to drive said display devices responsive to picture signals supplied from a signal furnishing device, is taught by Takahara (U.S. Pat. No.6628355), (Fig. 1 & 10, items 11-25, Column 2, lines 27 through 32, Fig. 54 & 56, item 541, Column 2, lines 52 through 58, Fig. 11, Column 28, lines 15 through 41).

Furthermore, **Claim #4**, a display apparatus according to claim 1 wherein said display devices are arranged in a passive matrix system, is taught by Takahara (U.S. Pat. No.6628355) (Fig. 1 & 10, items 11-25, Column 2, lines 27 through 32, Fig. 54 & 56, item 541, Column 2, lines 52 through 58, Fig. 11, Column 28, lines 15 through 41).

Considering now, **Claim #5**, a display apparatus according to claim 1 wherein said display devices are organic electroluminescence devices, is taught by Takahara (U.S. Pat. No.6628355), (Column 23, lines 51 through 61).

With respect to **Claim #9**, a display apparatus according to claim 1 wherein said display device is a light emitting diode, is taught by Takahara (U.S. Pat. No.6628355), (column 122, lines 36 through 50).

Furthermore, **Claim #10**, a display apparatus according to claim 1 wherein said display device is a plasma device, is taught by Takahara (U.S. Pat. No.6628355), (column 23, lines 29 through 39).

With respect to **Claim #11**, a display apparatus according to claim 1 wherein said display device is a liquid crystal device formed of a liquid crystal material, is taught by Takahara (U.S. Pat. No.6628355), (Fig. 1 & 10, items 11-25, Column 2, lines 27 through 32, Fig. 54 & 56, item 541, Column 2, lines 52 through 58, Fig. 11, Column 28, lines 15 through 41).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takahara (U.S. Pat. No.6628355) as applied to claims 1 through 5 and 9 through 11 above, and further in view of Tanaka (U.S. Pat. No.5798744).

Takahara (U.S. Pat. No.6628355) discloses the claimed invention except for the substrate carrying said display devices and are connected with bumps to said display devices through terminals. Tanaka (U.S. Pat. No.5798744) teaches that it is known to

have substrate carrying said display devices and are connected with bumps to said display devices through terminals.

Tanaka (U.S. Pat. No.5798744), for **Claim #2**, a display apparatus according to claim 1 wherein said drive circuit substrates are arranged on the surface of said panel substrate carrying said display devices and are connected with bumps to said display devices through terminals, is taught (Fig. 7, Column 10, lines 34 through 67, Column 11, lines 1 through 2).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have substrate carrying said display devices and are connected with bumps to said display devices through terminals as taught by Tanaka (U.S. Pat. No.5798744), since Tanaka (U.S. Pat. No.5798744) states at Column 10, lines 34 through 67, Column 11, lines 1 through 2 that such a modification would allow contact resistance of the microbumpbonding

### **Allowable Subject Matter**

The following is an examiner's statement of reasons for allowance: The prior art fails to teach.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claims 6 through 8 are allowed.

Claim #6

- Transparent electrode film being electrically connected through said electrode film to a first electrode passed through said first and second insulating films formed so as to be exposed on said second insulating film, said metal electrode film being electrically connected to a second electrode passed through said second insulating film formed so as to be exposed on said second insulating film

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866 – 217 – 9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre' Stevenson whose telephone number is (571) 272

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1683; attempts to contact examiner by phone after February 5, 2004 should be addressed to (571) 272 1683. The examiner can normally be reached on Monday through Friday from 7:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Niebling, can be reached on (571) 272 1679. The fax phone number for the organization where this application or proceeding is assigned is (703) 308 7724.


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 0956. Also, the proceeding numbers can be used to fax information through the Right Fax system;

**(703) 872-9306**

Andre' Stevenson

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03/18/04

  
John F. Niebling  
Supervisory Patent Examiner  
Technology Center 2800